

laboratory method for the diagnosis of malaria. The Performance of Malaria Microscopists in all health facilities have been raised concerns by many experts. Microscopists who are working at Malaria Rechecking Laboratories have to be competent to cross check blood film slides which are collected from testing sites.

Methods & Materials: A cross-sectional study was conducted to assess the performance of 107 Malaria Microscopists who are working at 23 Malaria Rechecking Laboratories in Ethiopia. A set of 12 blood film slides containing known Negative and positive (different species, stage, and parasite density) results were distributed to each Malaria microscopists. Data was collected and entered into Microsoft Excel sheets and exported to software SPSS version 20 for analysis. Chi-square (for categorical data), sensitivity, specificity, percent agreement, and kappa score were calculated to assess laboratory professionals' performance in detecting and identification of *Plasmodium* species. Association was taken as significant at $P < 0.05$.

Results: A total of 107 study participants were involved in this study, the mean age of the participants was 30+/- 5.04 years. Overall, the sensitivity of participants in detection and species identification of malaria parasites were 96.8% and 56.7%, respectively. The overall agreement on detection and identification of malaria species was 96.8% (Kappa = 0.9) and 64.77% (kappa = 0.33), respectively. About 34(31.8%) participants were used unrecommended quantification (+) system. The least malaria species which were identified correctly by the participants were *P. malariae*(2.8%) followed by *P. ovale*(32.7%). Malaria microscopists working at sub regional laboratory had a better Quantification performance ($P=0.003$). Study participants who were participated on malaria microscopy and quality assurance training had a better performance on parasite quantification ($P<0.001$).

Conclusion: Agreement of the participants with expert microscopist in the identification of different malaria species and quantification were very low. Most participants did not identify *P. malariae* and *P. ovale* correctly. Therefore, policy backed regular competency assessment and training for malaria microscopists is essential and mandatory that can assure proper diagnosis and management of malaria in Ethiopia.

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Assessing geohelminth parasites among geophagous school children, in Owerri Metropolis Area, Imo State, South-Eastern Nigeria

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Background: Geophagia or soil-eating is a potential risky behavior, among other health hazards, associated with acquisition of geohelminth parasites, or soil transmitted parasites (STPs), especially among school-aged children

Methods & Materials: A parasitological survey of geophagous children in four nursery-primary schools, in Owerri municipal council area, was investigated. A total of 300 pupils (170 females and 130 males) of age 3-14 years from nursery 3 to primary 6, were selected randomly, from the different schools and examined for

geophagic practices and parasitic infections, with a well-structured questionnaire[for Socio-demographic data] and standard parasitological technique[for detecting STPs]. Anthropometric data and Stool samples were collected from them, with the help of their school health workers/nurses/class teachers, using clean dry, specimen bottles, and data-recording devices. All the collected stool samples were correctly labeled, transported to the laboratory and analyzed using concentration formol-ether technique and wet-mount microscopic examination

Results: Results shows that, out of the 300 pupils examined, 25 (8.3%) were geophagic and 24 (8.1%) infected with parasites. The soil-transmitted parasites (STPs) observed include, *Ascaris lumbricoides* (33.3%), *Trichuris trichiura* (25.0%), *Entamoeba histolytica* (20.8%), *Strongyloides stercoralis* (12.5%), and Hookworm (8.3%). *Ascaris lumbricoides* was the commonest and most (33.3%) prevalent of all the STPs, while Hookworm was the least (8.3%). The presence of these geohelminth parasites in the study are statistically significant ($P<0.05$), among the younger children, within 3-6 years old. This younger age-group was the most geophagic (8.9%) and most infected (66.7%), and highlighting a strong relationship, between geophagy and geohelminth parasitism. Also geophagia and parasitic infection decreased with increasing age, and were more pronounced in males (70.8%) than in females (29.2%)

Conclusion: These findings demonstrate that, geophagia is an important risk factor for orally acquired parasitic infections in school children. Therefore education regarding risk of geophagia in younger children and mass-targeted Chemotherapy should be an integral component of any STPs control programs, in nursery-primary schools in the studied area.

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Pediculosis among school children, in Owerri north local government area of Imo State, South Eastern Nigeria



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Background: Social cultural orientation, poverty, lack of knowledge and poor environmental hygiene has continued to encourage the persistence of ectoparasites and infestations, especially among the most vulnerable school-age children leading to poor academic performance

Methods & Materials: The study therefore, investigated the prevalence of lice infestation (pediculosis) among primary school children in Owerri North Local Government Area of Imo state, South Eastern Nigeria, between the months of June-September, 2015. A total of 500 (200 boys and 300 girls), of primary (1-6) school children, aged between 3-13 years, from four different schools, designated (A, B, C, and D), was investigated for the presence of lice infestation. A Questionnaire was used to assess the childrens' and teachers' knowledge, about the lice (*Pediculus humanus capitis* (head louse), *Pediculus humanus corporis* (body louse), and *Phthirus pubis* (crab louse).